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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/558,363

11/25/2005

Yasushi Okubo

KON-2053

3845

20311 7590 02/22/2010  
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EXAMINER

HON, SOW FUN

ART UNIT

PAPER NUMBER

1794

NOTIFICATION DATE

DELIVERY MODE

02/22/2010

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

info@lmiplaw.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/558,363	<b>Applicant(s)</b> OKUBO ET AL.	
	<b>Examiner</b> SOPHIE HON	<b>Art Unit</b> 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 22 October 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 12-17 and 22-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 12-17 and 22-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)         | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

***Response to Request for Reconsideration***

***Repeated Rejections***

1. The 35 U.S.C. 103(a) rejections of claims 12-17, 22-31 over Yamada in view of Machell, as evidenced by Sobrinho, are repeated for the same reasons previously of record in the Office action dated 07/24/09.

***Response to Arguments***

2. Applicant's arguments have been fully considered but they are not persuasive.
3. Applicant argues that the display substrate of Applicant maintains low moisture permeability after thermal shock or heat treatment, due to the biaxial stretch of the film, as compared to a film having the same composition but no stretch.

Applicant is respectfully apprised that unlike the comparative examples cited by Applicant, the display substrate of Yamada has stretch. What Yamada fails to teach is biaxial stretch of the transparent cellulose ester film.

Machell is the secondary reference that teaches that a transparent cellulose ester film is biaxially stretched (stretch ratio in both directions, column 10, lines 5-17), in both the lateral direction and the conveyance direction (transverse direction and direction of travel of the web, column 10, lines 5-11), for the purpose of providing the desired superior surface properties (column 10, lines 29-45) which include surface smoothness and optical uniformity as well as dimensional stability (column 2, lines 25-

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32) well suited for a transparent optical substrate (photographic film support, column 2, lines 5-15).

Sobrinho is evidence that the surface smoothness of a display substrate is critical for the smooth deposition of a metal nitride ([0026]) or metal oxide ([0027]) and is thus increased for the purpose of providing the desired improvement in moisture barrier properties ([0026]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have biaxially stretched the transparent cellulose ester film of Yamada in both the conveyance direction and the lateral direction, in order to increase the surface smoothness of the film, as taught by Machell, which is critical for the smooth deposition of the moisture proof metal oxide or metal nitride film on the transparent cellulose ester film of Yamada, so as to obtain the desired improvement in moisture barrier properties, as taught by Sobrinho.

To summarize, Sobrinho teaches that the moisture barrier properties, which include low moisture permeability, are improved by the biaxial stretch of the transparent cellulose ester film of Yamada, as modified by Machell.

4. Applicant argues that neither Yamada, Machell nor Sobrinho teach or suggest that their products or the methods for making their product will result in a product that will not just result in a product having low moisture permeability, but one that has low moisture permeability after shock.

Applicant is respectfully apprised that Applicant has not provided clear comparative data demonstrating that the display substrate of Yamada, as modified by

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Machell, does not maintain low moisture permeability after thermal shock. As such, although none of the references specify that the improved moisture barrier properties, which include low moisture permeability, are maintained after thermal shock, where the claimed and prior art products are identical or substantially identical in structure and composition, or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established, and the claimed properties are presumed to be inherent. See MPEP 2112.01. In the instant case, the display substrate of Yamada, as modified by Machell, comprises the claimed moisture proof film containing a metal oxide or metal nitride formed on a biaxially stretched transparent cellulose ester film that is drawn within a range of 3 through 100 percent in both in a conveyance direction and a lateral direction, wherein the modified display substrate has improved moisture barrier properties, which include low moisture permeability, as evidenced by Sobrinho.

5. Applicant's arguments against the secondary references of Kakinuma and Ota are directed against the primary combination of Yamada in view of Machell, as evidenced by Sobrinho, and are addressed above.

### ***Conclusion***

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication should be directed to Sow-Fun Hon whose telephone number (571)272-1492. The examiner can normally be reached Monday to Friday from 10:00 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Sample, can be reached on (571)272-1376. The fax phone number for the organization where this application or proceeding is assigned is (571)273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*/Sophie Hon/*

Sow-Fun Hon

Examiner, Art Unit 1794